AKG-37-1000
Response to Comments

Medium-size Suction Dredge
General Permit

U.S. EPA, Region 10
August , 2000

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Introduction

On January 14, 2000, EPA, Region 10 proposed reissuance of the Medium-size Suction Dredge National Pollutant Discharge Elimination System (NPDES) general permit (AKG-37-1000). The comment period began January 14, 2000, and ended March 14, 2000. Public Hearings were held in Anchorage on February 29 and in Fairbanks on March 7, 2000.

EPA received written comments on the reissuance of the General Permit for Medium-size Suction Dredges from Steven Herschbach, the Alaska Miners Association (AMA), Southeast Alaska Conservation Council, American Rivers, Pat Scofield, Ron Wendt, Brian Berkhahn, Marcia M. Foley, Marshall Ronne, Jr., Tim Hibbs, James Foley, Robert Estey, Charlene and Larry Cockrum, John Pulling, Allen W. Adams, Kreg Koelling, Phil Hontz, Sarah Lord representing the Fortymile Miners Association and the National Marine Fisheries Service (NMFS).

A Public Hearing was held in Anchorage on February 29, 2000. EPA received oral comments from Steve Herschbach and Ben Maresh. A Public Hearing was also held in Fairbanks on March 7, 2000. EPA received oral comments from Tom Bundtzen, Pete Hagglund, James Foley, Marcia Foley, Steve Borell for AMA, Ken Pohle, Dave Eberhardt, Forest Hayden, Jesse Atencio, Pat Scofield, Jamie Cox, Roger Burggraf, and Donald Stein. A copy of each transcript is part of the administrative record for the general permit.

EPA received a species list under the Endangered Species Act (ESA) from NMFS in a letter dated December 13, 1999.

EPA received recommendations on Essential Fish Habitat (EFH) from NMFS in a letter dated March 31, 2000. EPA's responses to these recommendations are included in this document.

On June 14, 2000, the Alaska Division of Governmental Coordination (ADGC) issued its Proposed Consistency Determination and the Final Consistency Determination followed on June 23, 2000. The determination found the general permit consistent with the Alaska Coastal Management Program (ACMP).

On June 30, 2000, the Alaska Department of Environmental Conservation (ADEC) issued a Certificate of Reasonable Assurance under Section 401 of the Clean Water Act (Act) for proposed discharges from Medium-size Suction Dredges.

Permit Authority

1. **Comment:** A commentor would like to see suction dredges, including 10 inch dredges, removed from the permit because many studies find evidence that suction dredging has no apparent effect on the health of the Fortymile River system or its biota.

   Response: The Act states that in order to discharge pollutants one must acquire a permit. The definition of *pollutant* is found in 40 CFR 122.2:

   "dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials,, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 *et seq*)), heat, wrecked or discarded, equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water."

   Suction dredges discharge rock and sand, which are pollutants under the regulations, and cannot meet Water Quality Standards (WQS) at the discharge point so an NPDES permit is necessary for suction dredge discharges. EPA has no regulatory authority to exclude individual river systems or a class of dischargers from this requirement.

2. **Comment:** A commentor asks how suction dredges, which do not add anything to a waterbody from an outside source, fall under the jurisdiction of the Act.

   Several commentors question the need for a permit at all since they claim it is evident that suction dredging has very minimal impact on the river system as a whole.

   Response: Suction dredging causes the discharge of "pollutants" to waters of the United States as those terms are defined by the Section 502 of the Act (See comment 1 for a definition of "pollutants"). Therefore, the discharges are regulated by EPA.

3. **Comment:** Several commentors question whether any studies show the need for these regulations at all and whether they are justified, where the regulations originated and who or what agency in Alaska requested these regulations. One commentor is appalled and dismayed that we would even consider permits for suction dredging.

Response: No State agency in Alaska requested that EPA regulate suction dredging, but Section 301 of the Act states, "Except as in compliance with this section and sections 302, 306, 307, 318, 402, and 404 of this Act, the discharge of any pollutant by any person shall be unlawful." An NPDES permit issued under Section 402 of the Act makes a discharge lawful. Since the state of Alaska has not assumed delegation of the NPDES permitting program, EPA is required to issue these permits. The limitations, monitoring, and reporting requirements of the general permits are based on EPA's application of the requirements of the permitting regulations found in 40 CFR § 122 to address the discharges to waters of the United States. EPA has regulated suction dredging under general permits since 1994.

4. **Comment:** A commentor notes that there are so many larger issues that affect fisheries and water quality in the US that he does not see how the recreational mining changes that are under review will make any difference.

Response: The general permit is used to cover the same types of discharge regardless of whether a process is being used for commercial or recreational purposes. There are few changes proposed from the previous general permit which covered medium-sized suction dredging. See the response to comments 1-3 on the need for an NPDES permit.

5. **Comment:** A commentor states that the Corps has shown a finding of de minimis effects on aquatic resources for suction dredges with nozzle openings of four inches or less. The commentor claims that EPA has ignored this concept although numerous studies, including EPA's own 1999 study of suction dredging, repeatedly and consistently support the Corps finding of de minimis effects.

Another commentor says that there is such a thing as de minimis impacts and suggests no permit should be required for suction dredges which may only have de minimis impacts.

Response: The Act does not contain any provision for smaller discharges or those with less impact to be treated as de minimis discharges with no permit requirement. As discussed in the response to comment 3, Section 301 of the Act states that all discharges are unlawful unless other sections of the Act are followed including the requirements of Section 402.

6. **Comment:** A commentor notes that to regulate against a "potential for harm" where none has been shown to exist is unjustifiable and must be challenged.

Response: Most permitting is done prior to direct harm to the environment. EPA's statutory and regulatory authority mandates that EPA regulate "potential for harm." It makes more sense to prevent harm to the environment prospectively rather than respond to direct harm.

State Actions

7. **Comment:** A commentor is concerned that ADEC waived its right to certify all general permits in July of 1999. With this waiver, the commentor says EPA is responsible for ensuring that the operations covered under the general permit comply with the WQS including the anti-degradation policy.

   Response: While ADEC did send a letter to EPA in July 1999 that was a general waiver of all NPDES permits, it was decided in workgroup meetings throughout last year that general permits were an important issue and that ADEC needed to certify these permits. ADEC certified the general permit on June 30, 2000.

8. **Comment:** A commentor says that EPA must determine whether placer and suction dredge mining projects meet the federal antidegradation policy found in 40 CFR 131.12(1) which states "[e]xisting instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected." Both the federal and state antidegradation policies contain provision that require making determination based on site-specific analysis before authorizing any activity that may lower water quality and that these analyses cannot be achieved under a general permit.

   Response: The antidegradation policy is a component of a State's Water Quality Standards. The requirement of 40 CFR 131.12(a) states that "[t]he State shall develop and adopt a statewide antidegradation policy and identify the methods for implementing such policy pursuant to this subpart. The antidegradation policy and implementation methods shall, at a minimum, be consistent with the following:"

   The antidegradation policy is a required element of a State's WQS and is not a federal requirement. The NPDES program requires that a permit contain the applicable State WQS and the State must certify that the permit meets WQS before it can be issued.

9. **Comment:** A commentor says that EPA must also ensure that the general permits comply with the requirements of the ACMP.

Response: EPA submitted a Coastal Zone Consistency Determination to ADGC on January 7, 2000. ADGC agreed with the EPA determination on June 23, 2000.

10. **Comment:** A commentor recommends that EPA include as a condition of the permit, a provision giving the state and public adequate notice and opportunity to review specific projects under the antidegradation policy and the ACMP.

Response: EPA has no desire to complicate this permit issuance with conditions that generally occur outside of the permit. A project proposed for the coastal zone generally goes through a consistency review for the other permits required to mine in the state of Alaska. A facility requesting a different mixing zone than certified by ADEC would need to apply for an individual permit.

Study Comments

11. **Comment:** Several commentors note that it is readily observable that the natural effects of stream erosion, flooding and the seasonal breakup of our rivers does more to affect the water quality, the biodiversity and in-stream ecosystems than all suction dredging disturbances combined. Rivers naturally return to normal conditions after severe events. The same can be argued from the standpoint of suction dredging. The recent EPA studies confirm this conclusion.

Response: While it is true that erosion and flooding are natural processes, suction dredging by placer miners is not. The timing and degree of naturally occurring conditions are different from that which would occur due to placer mining, and therefore such activity must be regulated to ensure the protection of the chemical, physical and biological integrity of the waters of the United States.

12. **Comment:** A commentor states that in all operations in the EPA Suction Dredge study, in no case did the plume and dredge pile exceed 10% of the width of the river. A concern of the commentor is allowing suction dredging in smaller streams where the dredge pile could extend across the entire channel which would have a much greater impact on the ecosystem and could easily impede movements of fish and other organisms. The commentor suggests that some standard be set in the permit for maximum plume and dredge pile width relative to the total river/stream width. The commentor says the maximum plume and dredge pile width should be required to be less than or equal to ten percent of the

wetted width of the river or stream.

Response: Although the commentor expresses a legitimate concern, EPA does not have data to support imposing standards related to dredge pile width relative to total river/stream width at this time. The EPA Suction Dredge Study was not designed to address impacts from the width of dredge piles or plumes on the ecosystem and the information presented was not correlated with any impacts.

13. **Comment:** A commentor states that EPA should find the budgetary resources to conduct additional studies including geomorphic and cumulative impacts of suction dredge mining as an aid to drafting future general permits.

Response: EPA agrees that more studies would be beneficial towards understanding the full effects of suction dredging on the environment.

Coverage Area

14. **Comment:** A commentor fully supports the exclusion of general permit coverage to waters adjacent to areas designated as wild under the Wild and Scenic Rivers Act, but requests that the prohibition also apply in the case of a river designated as "scenic" under the Wild and Scenic Rivers Act of 1968, as amended. The commentor claims that an extensive turbidity plume would impair the "scenic value" of the river and eliminate the ability of other users of the river corridor to observe marine life. It is recommended that EPA scrutinize the underlying facts pertaining to individual proposals to conduct suction dredge mining on "scenic" rivers before allowing any such activities to proceed.

Response: EPA has limited the length of any potential turbidity plume to 500 feet. The EPA and US Geological Survey (USGS) Suction Dredge studies show that the plume usually dissipates in this distance. EPA does not consider this plume length to be extensive enough to warrant the exclusion from the general permit all facilities in the "scenic" portion of Wild & Scenic Rivers.

15. **Comment:** Along with the prohibitions on activities in National Parks System Units, National Monuments, Sanctuaries, Wildlife Refuges, Conservation Areas, Wilderness Areas, Critical Habitat Areas or water adjacent to the boundaries designated as wild under the Wild & Scenic Rivers Act, a commentor suggests additional prohibitions:

a. any State Park, State Refuge, Preserves, Sanctuaries or Recreation Areas,
b. any National Historic or Natural Landmark,

c. any congressionally designated Land Use Designation (LUD) II areas which are to be manage in a roadless state to retain their wildland character,

d. any waters adjacent to the boundaries of rivers recommended for designation as Wild & Scenic Rivers under the modified 1997 Tongass Land Management Plan (1999),

e. within one nautical mile of any major Stellar sea lion haulout or rookery site or within any Stellar sea lion "Critical Habitat Area" defined in 58 FR 45269 without written permission from the Regional Director of the National Marine Fisheries Service and

f. any "Areas Which Merit Special Attention" (AMSA) or areas otherwise designated for their historic, prehistoric and archaeological resources or recreation or subsistence values under ACMP.

Response: EPA proposed a general permit to allow for the regulation of a vast number of similar discharges through one action rather than going through the administrative and financial burden of permitting each facility individually. Some areas have been excluded from coverage under the general permit but if the applicability of the GP is too limited, it will not have the desired affect of reducing the Agency's administrative burdens. EPA has considered this comment by section and will respond to each section.

a. Gold mining is not allowed in State Parks, however some Parks allow gold panning. The only state Preserve is the Bald Eagle Preserve and it is a State Park as are all Recreation Areas. The exclusion section says that if an operator would like to dredge in any of the areas, an individual permit is necessary. This is misleading because no mining is allowed in State Parks, even with a permit from EPA. Because of this, these areas have been removed from Permit Part I.E.2.c.i.

As for other State legislatively designated special areas, some are closed to mineral entry and if a project is proposed for open areas, it undergoes an individual project review. If a state land management agency does not feel that the general permit is adequate to control the discharge from any facility

that may be considered, they have the opportunity to request that the Director deny general permit coverage for the facility under Permit Part I.E.2. The public may petition the Director to require an individual permit for a facility under 40 CFR § 122.28(b)(3).

b. If a facility is proposed for a National Historic or Natural Landmark and the land management agency believes that the general permit is inadequate to control the discharge from the facility, there is an opportunity to petition the Director to require an individual permit for the facility. These two designations have been added to Permit Part I.E.2.c.i.

c. If a facility is proposed for a LUD II and the land management agency believes that the general permit is inadequate to control the discharge from the facility, there is an opportunity to petition the Director to require an individual permit for the facility. This designation has been added to Permit Part I.E.2.c.i.

d. Since there is no guarantee that the waters recommended for special designation will be designated, EPA believes that it is premature to exclude the use of the general permit. If these waters are designated under the Wild & Scenic Rivers Act, then the permit would not cover any facility located in the wild portion of the designated areas.

e. EPA has considered a buffer zone between dredges and Stellar sea lion haulouts and rookery sites due to the species' status as Threatened and/or Endangered under the Endangered Species Act. A one nautical mile buffer zone has been added to the general permit.

f. Under the ACMP review of this general permit, no coastal districts that have created AMSAs or contain other designated areas have requested an exclusion from coverage under the general permit. If a coastal district had expressed this concern, EPA would have considered an exclusion.

16. **Comment:** Several commentors state that there is no scientific justification for prohibiting the use of the general permit in any State waters even if they are surrounded by Federal upland strips designated as "wild" under the Wild & Scenic Rivers Act. The commentor claims that these are State waters and the State does not object to the use of the general permit in these areas.

One of these commentors also says that the general permit should

cover any operation that is adjacent to boundaries of all designated areas such as Parks, perserves, etc.

Response: Regardless of who owns the land underneath a waterbody, the waters are still considered waters of the United States. EPA's goal is to limit the discharge of pollutants into waters of the United States, the designation of which overlaps with State waters.

EPA has excluded areas from coverage under the general permit because, although these permits protect water quality in Alaska, general permits represent a compromise between environmental protection and cost (for example, in establishing monitoring frequency), based in part on the vulnerability of the resource to be protected. Issuing individual permits for facilities discharging to waters that run through the wild portion of a Wild and Scenic River corridor and other excluded areas will provide a higher level of scrutiny that may change the balance between cost and protection for these waters.

17. **Comment:** A commentor clarifies that in Permit Part I.C. the reference to Critical Habitat Areas involves only "federal" areas as the State has not in any way imposed this limitation and makes the suggestion to add the word "Federal" to this Part.

Response: In the Fact Sheet for the 1996 modification [61 FR 3406, January 31, 1996], Permit Part I.C. was supposed to specify "National" to not only Parks and Monuments but also to Conservation Areas, Wildlife Refuges and Wildlife Areas. The Response to Comments for the 1996 modification also added "National Sanctuaries and Critical Habitat Areas." Since it was not EPA's intent to change these designations during this reissuance, the word "National" will be added where appropriate.

General Permits

18. **Comment:** A commentor supports strong permit conditions that maintain the ecological health of Southeast Alaska's streams and rivers. While the commentor understands that general permits in some ways reduce the administrative burden on regulatory agencies, the commentor states that general permits often fail to adequately address site-specific conditions, unforeseen future adverse impact to water resources and the unique environmental and cultural conditions in Southeast Alaska.

Response: This general permit is not meant to address site-specific conditions. ADEC has authorized a mixing zone for turbidity but it

applies only to the type and size of facilities covered by the GP. The permit also gives a land management agency or an interested party the opportunity to request that a facility not be covered by the GP but that an individual permit be required. If the facility does not meet the coverage requirements of the GP, an individual permit would be required. EPA observes that it would be difficult for even an individual permit to prevent "unforeseen future adverse impacts" to any resource whether it be cultural or environmental.

19. **Comment:** A commentor expressed concern that the Director may require any person authorized by a general permit to apply for and obtain an individual permit or any interested person may petition the Director to take this action. The concern is that one person can "turn in" another with little evidence that any violations have occurred. The commentor requests that EPA be more strict on this subject and require very specific proof in order to petition the Director.

Response: 40 CFR § 122.28(b)(3) states "The Director may require any discharger authorized by a general permit to apply for and obtain an individual NPDES permit. Any interested person may petition the Director to take action under this paragraph." Once the Director receives such a petition it is still up to the Director's discretion whether to require an individual permit. The reasons an individual permit may be required are found in Permit Part I.E.1. and include but are not limited to:

a. The single discharge or the cumulative number of discharges is/are a significant contributor of pollution;

b. The discharger is not in compliance with the terms and conditions of the general permit;

c. A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;

d. Effluent limitations guidelines are subsequently promulgated for the point sources covered by the general permit;

e. A Water Quality Management Plan containing requirements applicable to such point sources is approved;

g. A Total Maximum Daily Load (TMDL) and corresponding wasteload allocation has been completed for a waterbody or a segment of a waterbody;

h. Circumstances have changed since the time of the request to be covered so that the discharger is no longer appropriately

controlled.

20. **Comment:** A commentor would like to know who makes the decision on what is a "significant contributor of pollution."

Response: The regulations in 122.28(b)(3)(i)(G) states that the Director, now defined in Permit Part VI. to be the Regional Administrator of EPA Region 10 or his duly appointed representative, would make this decision.

Notification Requirements

21. **Comment:** A commentor suggests that in Permit Part I.F.1. the word *must* be changed to *should* to allow flexibility that is typically being exercised by EPA while being absolutely accurate from a legal standpoint.

Response: It is a requirement that owners or operators of a facility submit an Notice of Intent (NOI) to be covered by this general permit. Since this is a requirement and not an option, EPA will maintain the use of "must" in the permit. If an NOI is submitted after the designated date, EPA can use its discretion to account for the concerns expressed by the commentor.

22. **Comment:** A commentor recommends dropping the requirement in Permit Part I.F.1.b. and to automatically roll over all operations that have 1994 GP coverage. In the alternative, the commentor recommends having new NOIs due before discharging instead of by a specific date.

Response: The provision requiring a new NOI from each facility after the effective date of the general permit has been retained. This will allow EPA to obtain current information and avoid the confusion of whether permit coverage actually rolled over because about 28% of permittees covered under the previous permit did not reapply to obtain an administrative extension. It will also serve as a reminder that new mixing zones need to be authorized by ADEC. The mixing zones authorized in the previous permit do not roll over to this new permit. The date of November 30, 2000, has been replaced by the clause "within 120 days of the effective date of this permit." Facilities that miss this deadline could be considered recommencing facilities under Permit Part I.F.1.c.

23. **Comment:** A commentor recommends changing Permit Part I.F.1.c. from 90 days to 60 days.

Response: This change has been made in the final permit but EPA has no regulatory requirement to grant coverage to a permittee in the time frame noted.

24. **Comment:** A commentor states that the requirement in Permit Part II.C.2. to "report information obtained from ADFG . . ." is not clear and the purpose it serves cannot be determined. The commentor recommends that this requirement be deleted from the permit.

Response: Permit Part II.C.2. requires permittees to consult with Alaska Department of Fish and Game (ADFG) to ensure that they are aware of spawning areas, as required to comply with the separation distance. This requirement is necessary to ensure that the contact with ADFG was made.

Dredge Size

25. **Comment:** Several commentors say that the EPA Suction Dredge study shows no need for separate and/or more stringent permits for dredges up to what the state considers commercial dredges (i.e. larger that six inch nozzle) so a single small dredge permit would be the best way to regulate small dredges. A commentor also suggests that a dredge over six inches be covered by the Annual Placer Mining Application (APMA).

Response: EPA will consider including five and six inch dredges in the small suction dredge permit (AKG-37-5000) when it is reissued in 2002. For now, it is best to include over four inch up to six inch dredges in the medium-size suction dredge permit or else there would be no general permit coverage for these facilities and each of them would be required to file an application for an individual permit.

There seems to be some confusion about whether EPA must regulate "commercial" suction dredges. The APMA is an application process not a permit. Each facility would still need to acquire a permit from EPA for its discharge and without a general permit, each facility would have to apply for and receive an individual permit prior to discharging. This permit requirement exists regardless of whether the state of Alaska is regulating a facility or not.

26. **Comment:** A commentor asks what basis does EPA use in stating that recreational dredges are four inch nozzle size and under when the state of Alaska recognizes a dredge up to a six inch nozzle as being recreational.

Another commentor notes that in the EPA Suction Dredge study, there are two instances when six inch and smaller dredges are called recreational. It is recommended that the size for recreational dredges should be changed from a four inch maximum to a six inch maximum nozzle size

Response: EPA is aware that the state of Alaska uses a six inch nozzle for the cut-off point between recreational and commercial operations, but EPA also notes that the cutoff used by the Army Corps of Engineers was four inches. The general permit is used to cover the same types of discharge regardless of whether a process is being used for commercial or recreational purposes. At the time when the sizes for coverage by the general permits were determined, EPA considered the potential impacts that could be caused by dredges which are independent of the purpose of the operation.

27. **Comment:** A commentor states that all dredges with a 10 inch and smaller nozzle be classified as small suction dredges and that dredges with less than a six inch nozzle be classified as recreational and require no permit from EPA. Medium-size suction dredges should be those dredges over 10 inches up to 12 inches and any dredge larger than a 12 inch nozzle should require an individual permit.

Response: Although the recent studies on suction dredging have provided additional information on this issue, the EPA Suction Dredge Study stated that additional study is needed to fully quantify the impact of suction dredge mining on the environment of Alaska before final conclusions are reached regarding the effects of this activity on Alaskan streams and their associated plant and animal communities. Given this position, the commentor recommends a permitting strategy that EPA is not willing to propose at this time.

28. **Comment:** A commentor believes that the maximum nozzle size allowed should remain at eight inches based on the data found in the EPA Suction Dredge Study.

Response: The determination to increase the nozzle size did not depend only on the EPA study but on information found in the USGS study. This study indicated that even though the ten inch dredge was operating under more adverse conditions than the eight inch dredge, compliance with the turbidity requirements of the permit was still achieved. The nozzle size indicated in the proposed permit will remain in the final permit.

Dredge Spacing

29. **Comment:** A commentor states that the EPA Suction Dredge Study acknowledges "cumulative impacts" were not addressed. Instead, the Study noted that cumulative impacts will be a function of how many operations are allowed on a river, the size of the dredges and, in effect, how far apart the dredges are. Given the importance of the standard of "cumulative impacts," the 800 feet separation distance is entirely too close together and poses severe risk to the river and to the enjoyment of all other types of users of the river and its environs. The commentor suggests that EPA consider widening the required distance between suction dredge operations.

Response: The 800 foot separation zone is intended to prevent the creation of extended overlapping discharge plumes to ensure that there are areas of the receiving water where water quality standards are being met and where sediments are unimpacted. EPA believes that the 800 foot zone adequately ensures that cumulative impacts will not be detrimental to the receiving waters.

30. **Comment:** Several commentors note that the prohibition on dredging and discharge are prohibited within 500 feet of locations where fish are spawning or where fish eggs or alevins are known to exist at the time dredging occurs is a duplication of ADF&G requirements and presumes in advance to know what ADF&G will require. Suggested changes include:

Each Permittee shall consult the regional office of the ADF&G for the region in which the Permittee proposes to operate a dredge in order to obtain the information necessary to comply with ADF&G regulations regarding suction dredging. Each permittee shall report the information obtained from ADF&G, and the name and title of the official contacted to EPA concurrently with the NOI

or

refer to anadromous fish rather than fish.

Other commentors want to know why EPA is concerned with fish and game issues.

Response: The intent of the provision for eggs and spawning was to control suction dredging in areas where anadromous fish are found (61 FR 3410, January 31, 1996). This intent was not clarified in the 1996 modification nor in the proposed permit. Permit Part II.C.2.

shall be revised to include this clarification. See response 34 for reasons why EPA is concerning itself with habitat issues.

31. **Comment:** A commentor asks why there is a spacing of 800 feet in the suction dredge permit but only 300 feet in the mechanical general permit.

Response: The response to Comment 29 deals with the reason for the spacing between suction dredges. The reason the mechanical general permit requires only 300 feet between discharges is that there are no mixing zones authorized in the mechanical general permit as there are in the medium-size suction dredge general permit where 800 feet includes a 500 foot mixing zone and a 300 foot buffer equal to the mechanical general permit.

32. **Comment:** A commentor asks if he has to dredge between two areas to make it look like one location to avoid the spacing requirements.

Response: If the areas were disturbed by the same dredging operation, now defined in Permit Part VI., then the spacing requirements do not apply.

Best Management Practices (BMPs)

33. **Comment:** A commentor says that the restriction on wheeled or tracked equipment found in Permit Part II.C.4. is too broad and not required. Suggested language is:

No wheeled or tracked equipment may be used instream while dredging is in progress and unless it is allowed by the ADFG Title 16 permit.

Response: EPA believes that the additional language clarifies the original intent of this BMP so this language has been added to the general permit.

34. **Comment:** Many commentors say there are many serious problems with Permit Part II.C.5.

a) The 800 foot limit is unnecessarily restrictive, serves no scientific purpose and cannot be justified. One commentor also states it is not supported by the EPA Suction Dredge Study, the USGS study or any other scientific study.

b) The current wording precludes the practice of using a 2 or 4 inch suction dredge as an exploration tool to define the pay zone.

This practice reduces the area disturbed by a larger dredge.

c) The phrase "apparent that another operation has taken place" is too vague. The question is asked, "Apparent when?" this morning, last week, this decade? The commentor states that knowledge of historic mining in an area could preclude further dredging.

Suggested wording for this Permit Part is:

5. Suction dredges shall not operate within ~~800 feet~~ the discharge plume of

~~a.~~ another dredging operation of another different permitted operation occurring simultaneously ~~or~~

~~b. a location where it is apparent that another operation has taken place.~~

Other commentors suggest:

Suction dredges with larger than 4 inch nozzle openings shall not operate simultaneously within 500 feet of another dredge with a larger than 4 inch nozzle opening.

Response: Under Section 101 of the Clean Water Act, EPA is required to restore and maintain the chemical, physical and biological integrity of waters of the United States. Protection of the physical integrity of waterbodies includes protection of habitat. Some separation between the end of one mixing zone and the beginning of the next is necessary to protect habitat in the receiving waters and ensure that there are areas in the receiving water where water quality standards are being met and where sediments are not impacted. Permittees who believe that they can operate with a mixing zone less than 500 feet may request an individual permit which would allow them to operate with a smaller separation distance.

EPA did not intend by the language to keep dredges in the same dredging operation from operating. EPA has defined the term "*dredging operation*" as "a simultaneous operation of a medium-size dredge and a dredge of four-inch or less nozzle size within 800 feet of one another." This is now found in the definitions in Permit Part VI.

The response to comments for the 1996 modification addressed the issue of "apparent" dredging. The provision relies on the visual observation by the permittee. The following redlined language has been included in this permit part:

5. Suction dredges shall not operate within 800 feet of:

   a. another dredging operation occurring simultaneously or,

   b. a location where it is visually apparent by the permittee that another operation has taken place.

35. **Comment:** Several commentors state that the wording of Permit Part II.C.3. ("Winches or other motorized equipment shall not b

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obstructions”) is vague because it does not address the defi

nitionof“in-stream.”

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that this requirement should be deleted from the draft permit

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Response: The commentor is correct that the term “in-stream” has not been defined in the permit. This has been corrected to define “in-stream” as being within the “active stream channel” which is defined as that part of the channel that is below the level of the water. Unvegetated gravel bars are considered part of the active stream channel.

This requirement, however, does not preclude any winching but it does prohibit the use of motorized winches. As discussed in the response to comment 34, EPA has the responsibility under the Act to protect and maintain the chemical, physical and biological integrity of waters of the US. In addition to being based on controlling turbidity, the prohibition on moving instream obstructions is based on habitat considerations that are necessary to protect the physical and biological integrity of the receiving water. Boulders moved within a streambed may change the hydrology of the stream resulting in erosion patterns different from naturally occurring ones. Additionally, the act of moving the boulder or other obstructions can potentially destroy habitat.

Limitations & Monitoring

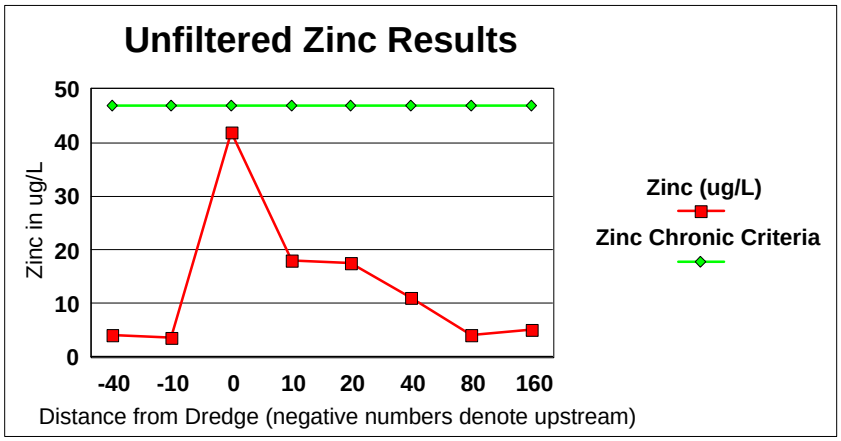
36. **Comment:** A commentor states that Permit Part II.A.1.a. and Part II.A.1.b. are contradictory because the numeric standard in the first is replaced with a narrative standard in the second. The commentor believes no one could detect a 5 NTU difference visually. Furthermore, the way the permit is formulated, it essentially defines away the proposed numeric standards. The commentor believes that the Act requires the implementation of numeric criteria. He recommends that a reasonable numeric standard be imposed and that an operator be required to monitor and conduct measurements of increases in turbidity on a daily basis.

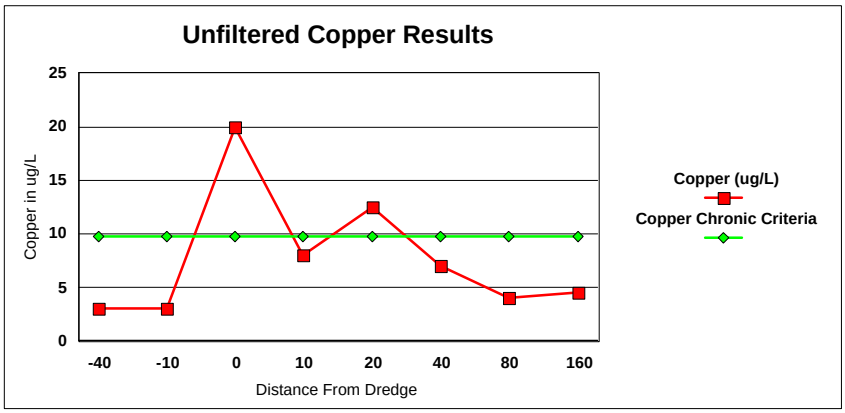
Response: 40 CFR 122.44(k)(2) allows the inclusion of Best Management Practices (BMPs) when numeric effluent limitations are infeasible. Since this determination was made in the Fact Sheet (FS IV.A.), the numeric standard in Permit Part II.A.1.a. should not be

included in the permit and has been eliminated. Pursuant to Section 402(a)(2) of the Act and 40 CFR 122.44(k)(2), BMPs were included in the permit. Required turbidity monitoring is included to ensure that the BMPs are being implemented properly (FS IV.B.).

37. **Comment:** A commentor believes that the data found in the EPA suction dredge study is insufficient at present to support the conclusion that monitoring turbidity is a full surrogate for monitoring metals. This commentor suggests that EPA require periodic monitoring, at least monthly, for the entire suite of metals found in the study.

Response: EPA believes there was not enough metals data collected during the EPA Suction Dredge Study (EPA-SD) to support a requirement for monthly metals monitoring in the general permit. The unfiltered metals data for copper and zinc show large spikes just below the dredge but that by 250 feet downstream of the dredge, the water quality is less than the chronic criteria for these parameters. The following graphs are reproductions of the graphs presented in the EPA-SD (page 21). For copper, the criterion was calculated using the lowest hardness value mentioned in the study which was 80 mg $CaCO_3$ /L (EPA-SD, page 13).





38. **Comment:** Two commentors state that EPA's Suction Dredge Study plus reports filed by operators show consistently that turbidity decreases to allowable levels within 500 feet of an operating dredge so it is redundant and unjustifiable to include the daily monitoring requirement.

Another commentor states that the monitoring of turbidity and recording of the results every day is a bit ridiculous and time consuming since dozens of studies have been done on this subject already.

Several commentors ask why, since the EPA Suction Dredge study determined that large dredges muddy the water within a certain distance but the effect dissipates rapidly, must everyone monitor their discharges.

Response: 40 CFR 122.44(i)(1) requires monitoring to assure compliance with the conditions of the permit. 40 CFR § 122.48(b) requires permits to include the type, interval and frequency of the monitoring. The monitoring of turbidity is an indication of whether the BMPs, which are included in lieu of effluent limitations, are working. Without monitoring, there would be no way of knowing if the BMPs are effective.

39. **Comment:** A commentor recommends a change to the permit to eliminate the need for testing, monitoring and reporting turbidity levels by operators of recreational-sized dredges. The commentor notes that the EPA Suction Dredge study shows that with the use of recreational-sized equipment, the streambed is returned to normal within one month's time, which is less than the length of time necessary for turbidity levels to return to normal from the effects of large, commercial-sized dredges, yet the requirements are the same.

Response: Analytical testing for turbidity is not a requirement of this general permit. The permittee is required to visually monitor the plume daily and report on an annual basis if the plume exceeded 500 feet in length. EPA does not consider these requirements to be onerous. The commentor appears to be mixing streambed rebound with turbidity levels in the second part of the comment. It would be expected that turbidity levels even from commercial size dredges would return to normal in less than a month's time.

40. **Comment:** Several commentors note that the required monitoring assumes that a recreational dredging operation is more than a one person operation which is not always the case. With only one person, it would be a physical impossibility for one person to operate a dredge nozzle underwater and monitor the plume at the same time.

Response: EPA understands the concern of the commentors, but believes that monitoring of some type is required to assure the effectiveness of the BMPs. EPA would have appreciated suggestions as to how to address this issue. The only alternative suggested in comments received on the general permit was to have no monitoring at all and EPA does not consider this alternative appropriate.

41. **Comment:** A commentor has concerns that EPA is abdicating its role as an agency by requiring self-monitoring and self-reporting. Also, the commentor feels that self-reporting is a violation of his Fifth Amendment right under the Constitution.

Response: Section 402(a)(2) of the Act requires that permits contain conditions on data and information collection, reporting, and other requirements deemed appropriate. With respect to whether the requirement infringes upon permittees' Fifth Amendment rights, in *U.S. v. Ward* (488 U.S. 242, 1980) the Supreme Court found that the privilege against self-incrimination applies only to criminal, not civil, penalties.

Miscellaneous

42. **Comment:** A commentor notes that some miners dredge over the winter because the water flows too fast at other times of the year. The reporting deadline of November 30 found in Permit Part III.B. is therefore a problem for such operations. A qualifying statement has been suggested:

B. Reporting of Monitoring Results. Monitoring results . . . not later than November 30 of each year unless dredging extends beyond October 31 in which case the AR shall be submitted no later than January 31 of the following year.

Response: EPA has changed the annual reporting requirement for all facilities to January 31 to cover any activity that occurred in the previous calendar year.

43. **Comment:** A commentor notes that when the permit restrictions reach the point where miners cannot dredge their claims, as it would appear in the draft copy of this permit, it amounts to a "taking" by the Federal Government. The commentor wants to know how the miners are to get reimbursed for the value of the claims which they cannot work.

Response: Section 301 of the Act requires an NPDES permit for the discharge of pollutants to waters of the United States. One prerequisite for a takings claim is that governmental regulatory action must cause the affected property to become devoid of all economic value. In addition, a governmental action is not a taking if the public purpose served by the action may reasonably be expected to be achieved by the action and that public purpose is of sufficient importance as to outweigh the effect on the property owner. EPA is aware of no court decisions holding that the requirement that an NPDES permit be obtained for the discharge of pollutants to waters of the United States constitutes a taking. In fact, the United States Supreme Court's decision in Milwaukee v. Illinois, 451 U.S. 304, 310-11, 68 L.Ed.2d 114, 122 (1981) strongly suggests that private property rights do not include the right to

discharge pollutants into the waters of the United States. The Court ruled that "it is illegal for anyone to discharge pollutants into the Nation's waters except pursuant to a permit." Even if an NPDES permit decision could constitute a taking in the case of placer mining in Alaska, EPA believes that the requirements imposed by the permit do not result in a miner's property becoming devoid of economic value. In addition, EPA believes that the permit's terms are necessary to achieve the Act's important public purpose - protecting the quality of the waters into which placer mining wastes are discharged.

44. **Comment:** A commentor protests the requirements of the general permit claiming that Alaska was built on gold mining and gold miners were in Alaska long before anyone else.

Response: While gold mining has played a part in Alaska history, to say that gold miners were in Alaska long before anyone else is untrue. This comment ignores the centuries-old native cultures throughout the state. Below is a short chronology from the website http://sled.alaska.edu/akfaq/akchron.html
that shows the state's history after the infusion of European influence.

1725 - Vitus Bering explores the North Pacific.
1743 - Concentrated hunting of sea otters begins
1784 - first white settlement - Three Saints Bay on Kodiak Island
1799 - Russians arrive at Sitka
1857 - Coal mining begins at Coal Harbor on Kenai Peninsula
1861 - Gold discovered on Stikine River near Telegraph Creek
1867 - US purchases Alaska from Russia
1872 - Gold discovered near Sitka
1876 - Gold discovered in Juneau
1880 - Gold discovered on Gastineau; Juneau founded
1890 - Large corporate salmon canneries begin to appear
1891 - First oil claims staked in Cook Inlet
1897 - 1900 The Klondike Gold Rush

Note that coal mining, salmon canneries and the first staking of oil claims all preceded the Klondike Gold Rush when many miners came to Alaska. Just because these industries started many years ago does not mean that they are exempt from the laws and regulations of the United States. The seafood industry, the coal industry and the oil and gas industry as well as suction dredges are subject to NPDES permits if their operations result in a discharge of pollutants to waters of the United States.

45. **Comment:** Two commentors stated that the public hearing was not properly publicized. They request that another hearing be held where

people are properly notified and where people who do not live near Fairbanks can attend.

Response: EPA's regulations [40 CFR § 124.10(b)(2)] require that a public notice of a public hearing be given at least 30 days before the hearing and that the public notice of the draft permit and the public hearing may be combined. This was the case with the public hearings held in Anchorage and Fairbanks. The public notice for the hearings and the proposed permits were available in two ways. EPA regulations [40 CFR § 124.10(c)(2)(i)] require that NPDES general permits be noticed in the Federal Register along with a notice in a daily or weekly newspaper within the area affected by the activity. On January 14, 2000, a notice of the proposed permits and public hearings appeared in the Federal Register [65 FR 2400, January 14, 2000] as well as in the Anchorage Daily News and the Fairbanks Daily News Miner. EPA Region 10 has a standard mailing list which includes state agencies, other federal agencies and interested parties. This list receives notice of any permit action in Alaska. EPA also has an interested parties list which is comprised of entities who have expressed an interest only in mining permits. In addition to these notices, EPA mailed over 400 letters to persons with current or recently expired permits.

Since a public hearing is not the only method by which to comment on a permitting action and EPA believes all of the notice requirements were met, EPA decided not to hold any additional hearings.

46. **Comment:** A commentor requested that EPA go back to testimony that was submitted during the permit modification in 1996 and specifically requested that EPA consider comments made by the owner of Alaska Mining and Diving (Steven Herschbach).

Response: The testimony submitted during the modification in 1996 was addressed during that permitting process and the 1996 Response to Comments is attached to this document. The reissuance process deals with the permits which have been changed based on changing information so comments that were submitted in 1996 may not be relevant now. Mr. Herschbach did take the opportunity to submit comments at the public hearing in Anchorage as well as in writing through e-mail. His comments have been addressed in this document.

Essential Fish Habitat

47. **Comment:** Although NMFS believes that the general permit conditions will

adequately protect EFH, they are concerned about EPA deferring the review of EFH to the Corps. NMFS is concerned that the Corps does not review the permit for water quality issues.

Response: EPA believes that the general permit addresses the water quality issues of concern through the inclusion of BMPs and required turbidity monitoring. Since the water quality issues have been addressed, the intent of deferring a full EFH review to an agency (the Corps, in this case) that requires each project to go through an individual permitting action was to address issues such as location and timing of operations on a case by case basis.

48. **Comment:** NMFS requests that EPA expand the 500 foot buffer from known or observed spawning areas to marine waters.

Response: EPA realizes that the NMFS definition of the term "*fish*" is very broad (any marine organism that is not a marine mammal or a bird) but the response to Comment 30 explains that the intent of the buffer was for anadromous fish.

Endangered Species Act

In letters dated November 10, 1999, EPA requested species lists from NMFS and USFWS. In these letters, EPA stated

> If you have any concerns that reissuance of these general permits may adversely affect a threatened or endangered species, please contact me so the permits may be crafted to avoid this possibility.

EPA received a species list from NMFS in a letter dated December 13, 1999. NMFS expressed no concerns regarding the reissuance of the general permit. USFWS did not provide a species list to EPA.

EPA does not expect the reissuance of this general permit to adversely affect any species listed as threatened or endangered in Alaska. A commentor requested a one nautical mile buffer for Stellar sea lion rookeries and haulouts. EPA has excluded these areas from general permit coverage.